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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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09/116,147      07/16/1998      LIUYANG YANG      2207/6039      2224

25693      7590      06/24/2003

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EXAMINER

LEE, Y YOUNG

ART UNIT      PAPER NUMBER

2613

DATE MAILED: 06/24/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.  
09/116,147

Applicant(s)  
Liuyang Yang

Examiner  
Y. Lee

Art Unit  
2613



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on Jun 5, 2003
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above, claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claims \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☒ The proposed drawing correction filed on Dec 30, 2002 is: a) ☒ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some\* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). \_\_\_\_\_ 6) ☐ Other:

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## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/5/03 has been entered.

### ***Drawings***

2. The proposed drawing correction and/or the proposed substitute sheets of drawings, filed on 12/30/02 have been approved. A proper drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The correction to the drawings will not be held in abeyance.

### ***Claim Rejections - 35 USC § 102***

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

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(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors Protection Act of 1999 (AIPA) do not apply to the examination of this application as the application being examined was not (1) filed on or after November 29, 2000, or (2) voluntarily published under 35 U.S.C. 122(b). Therefore, this application is examined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Puri et al (6,148,026) for the same reasons as set forth in Section 5 of the previous office action, paper number 2, dated 3/16/01.

Puri et al, in Figures 1-6, discloses the same system for encoding video image data with at least first and second encoding passes as specified in claims 1-19 of the present invention, where each encoding pass (i.e. base and/or enhancement layer) includes a number of executable steps and at least one of the executable steps includes a number of executable first order sub-steps 1000, the first order sub-steps in at least one of the first and second encoding passes being identified as necessary (base layer) or unnecessary (enhancement layer) for execution of the encoding passes, the system including a video compressor 310 adapted to encode video image data during at least first and second encoding passes; a bit rate controller 440 coupled to the video compressor 310 and adapted to control the video compressor 310 during at least first and second encoding passes, such that the video compressor 310 is adapted to execute the necessary

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sub-steps during the first and second encoding passes; and an encoder/decoder 320 adapted to encode video image data during at least first and second encoding passes; wherein at least one of the first order sub-steps 1000 includes a plurality of executable second order sub-steps (e.g. mesh node motion vector) and the second order sub-steps are identified as necessary or unnecessary; wherein at least one of the executable first order sub-steps 1000 includes a plurality of  $n-1$  order sub-steps (e.g. mesh node geometry data generation) and at least one of the  $n-1$  order sub-steps includes a plurality of executable  $n$  order sub-steps (mesh node motion vector generation) where  $n$  is an integer greater than or equal to three, and  $n-1$  order sub-steps are identified in at least one of the first and second encoding passes as being necessary or unnecessary; wherein all of the  $n$  order sub-steps in the first and second encoding passes are identified 266 as being necessary or unnecessary.

### ***Response to Arguments***

5. Applicant's arguments filed 6/5/03 have been fully considered but they are not persuasive.

With respect to the newly amended limitation, applicant asserts on page 9 of the Remarks that Puri et al does not disclose at least first and second encoding passes. However, Figure 1C of Puri et al discloses the concept that a second encoding pass on the frame of video data is performed after the first encoding pass is performed on the frame of video data as required in claims 1, 7, 13, and 20 of applicant's invention.

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Applicant also asserts that Puri et al does not disclose excluding at least one sub-step from execution during an encoding pass for which that sub-step is unnecessary. However, column 5, lines 1-37, and column 6, lines 1-52 of Puri et al discloses at least some mesh nodes (e.g. motion vectors) are excluded (i.e. disabled) from execution during re-coding for which the nodes are unnecessary.

***Conclusion***

**6. Any response to this action should be mailed to:**

Commissioner of Patents and Trademarks

Washington, D.C. 20231

**or faxed to:**

(703) 872-9314, (for formal communications intended for entry)

(for informal or draft communications, please label

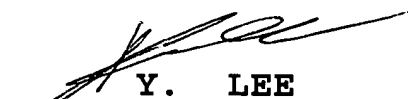
"PROPOSED" or "DRAFT")

**Or:**

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,  
Arlington, VA., Sixth Floor (Receptionist).

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7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Y. Lee whose telephone number is (703) 308-7584.

  
Y. LEE  
PRIMARY EXAMINER

Y. Lee/yl  
June 23, 2003